

E U R O P E A N P A T E N T O F F I C E

SOURCE: (C) WPI / DERWENT

AN : 94-352820 c44!

MC : L04-A L04-C11C L04-C16  
U11-C05F3A U11-C05F6 U12-A01A2 U12-A01B2 V08-A01B V08-A04A

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PR : JP930085492 930319

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IC : H01L33/00 ;H01S3/18

TI : Electrode formation method for gallium nitride compound semiconductor  
- involving adhesive of metallic or alloy layer to semiconductor  
followed by annealing

AB : J06275868 The process first involves adhering a layer made up of either chromium or nickel, or an alloy of both, onto a gallium nitride- type compound semiconductor. If this is an n-type gallium nitride semiconductor, it should have a carrier density beyond  $1 \times 10^{17}$  electrons/cc, and if it is a p-type gallium nitride compound semiconductor, then its whole carrier density must be greater than  $1 \times 10^{15}$  holes/cc. Following the adherence of the metallic or alloy layer, the semiconductor is subjected to annealing.  
ADVANTAGE - Raises emission output of light emitting element that use the pn junction of gallium nitride type compound semiconductor.  
Improves efficiency of operation.  
(Dwg.1/3)